



OVERVIEW OF BROADBAND INDUSTRY IN MICHIGAN AND CURRENT ISSUES THE INDUSTRY AND CONSUMERS FACE

Thank you Chairman Nesbitt and the members of the Energy and Technology Committee for the opportunity to talk with you today in regards to broadband and the current issues faced by Frontier Communications and our customers. My name is Bob Stewart, Government and External Affairs and this is Bob Pero, State Vice President of Michigan Operations.

Since the acquisition of the Verizon landline exchanges in Michigan in July 2010, Frontier has been on a mission to expand broadband services in the markets we serve. Upon acquisition, broadband was only available to only 38% of Michigan customers (measured at slow 764K download rate); the worst in the fourteen state acquired footprint. Furthermore, broadband service was largely concentrated in the larger communities of Muskegon, Mt Pleasant, Three Rivers, Adrian, and Alpena with no broadband expansion in any service area since 2008. At the end of 2012, 83% of our customers have terrestrial broadband with a minimum 1 MB upload and 3 MB download speed. This expansion represents 190,000 additional households with greater access, choice, and quality. In addition, many of our service areas now have speeds available up to 50 MB for business customers. We have also constructed fiber optic and copper facilities to hundreds of wireless towers with the necessary transport bandwidth for 4G LTE as well as unregulated WIFI spectrum providers' market expansion.

This change required replacement and rearrangement to nearly every data network element making up our broadband factory. This transformation required changing the entire assembly line from the modems and routers in our customer's homes and businesses to the large aggregation routers and validation servers to the hardened NAP connections; all running through a redundant fiber optic super highway nearly 2,000 miles long. This remarkable industrial engineering feat was accomplished with our team of nearly 500 Michigan employees with support from the rest of our company, our executives, and the communities we serve. And of course, our stockholders choose to invest in excess of \$100 million in Michigan with us to provide an excellent return on investment. The legislative and regulatory environment in Michigan is one of the best for telecommunications investment and has been made possible through the foresight and leadership of this committee and legislature and is critical to our success.

The investment cost of reaching very rural customers with terrestrial broadband can be very high. Frontier has partnered with HughesNet to offer to first truly high speed broadband from satellite that can provide speeds up to 15 MB on a new satellite launched in the summer of 2012. Frontier uses its highly trained Michigan based work force to install these services in addition to our landline services and is available today as very affordable pricing. Long term, Frontier believes satellite based broadband could be used successfully in 5% to 7% of our service area where the cost of terrestrial landline broadband is prohibitively high.

To further expand land based broadband, in December 2011 the FCC announced the Connect America Fund, CAF, and a series of steps transitioning from the traditional federal support of voice service in rural America to an emphasis on broadband service. In 2012, the FCC

announced the CAF Phase 1 program whereby funds would be distributed to jump start broadband infrastructure and services in unserved and underserved areas. The identification of the Michigan markets was lead by our partners at Connect Michigan and the MPSC through the broadband mapping process. Frontier fully participates with Connect Michigan both in the mapping process and community certification. Frontier has accepted over \$74 million in CAF 1 funding nationally for 27 states and over \$7 million has been identified for Michigan broadband expansion in unserved and underserved areas with stringent service level and implementation rules. Over \$140 million was left unclaimed by other providers and Frontier has filed comments with the FCC on distribution of the unclaimed funding. This \$7 million will expand reach to nearly 10,000 additional Michigan households.

In terms of content delivery, Frontier is experiencing explosive growth in video choices on the internet. Through providers like Netflix, YouTube and Frontier's own FITV, traditional video products and their delivery mechanism is changing. Up to 80% of the total bandwidth used by our broadband customers is for video applications. The consumer today is interested in video content delivery in a different manner more precise and personal manner then in the past. We are also seeing increasing demand for internet cafes. In 2012, Frontier implemented a WIFI mesh network covering the downtown Muskegon business district which was formerly heavy industrial and manufacturing and is now a rebuilding social, business, and recreation destination. This massive increase in video content and social media will require additional capital investment as customer demand more bandwidth for more devices and experiences.

This increase in internet accessibility and content does not come without real concerns about security and privacy. Frontier has developed a product suite named Frontier Secure enabling parental controls, data protection, and identity protection to protect against cyber threats. In addition, our CEO Maggie Wilderotter is the vice chair of the National Security Telecommunications Advisory Council (NSTAC) appointed by President Obama address cybersecurity. Frontier has also met with several members of the Michigan Congressional team in regards to cybersecurity legislation including Congressman Rogers and Kildee.

For a capital intensive business such as telecommunications, monies spend on capital for which there is no incremental revenue stream is problematic. Damage to fiber and copper cable facilities, relocation of facilities, and electrical interference of those facilities lead to millions of dollars of unfunded costs and interruption of critical services for Frontier. Many critical initiatives to our state including renewable wind energy and expansion of transportation infrastructure pose financial risks to Frontier and take resources away from delivering broadband to rural Michigan.

Our local Frontier management team and some members of our executive team will be in Lansing next week on Tuesday and Wednesday to discuss our progress in deploying broadband in your district and other issues to build on the success of past committees and legislators and offer new and innovative solutions for Michigan.

Thank you again for the opportunity to talk with you today. We would be happy to try to address any questions you may have.